

AMENDMENTS TO THE CLAIMS

A complete list of all the presently or formerly pending claims in the application is provided below, with suitable headings to show the status of each claim and, where appropriate, its current text. This listing of claims will replace all prior versions.

Listing of Claims

1. (Currently Amended) In a gaming system comprising a central authority and a plurality of gaming machines, wherein ~~at least one of said plurality of the~~ gaming machines (i) ~~comprises a meter configured to generate meter data, (ii) comprises a jackpot meter configured to generate jackpot data, (iii) is responsive to player cards having associated player identification numbers, (iv) is responsive to tickets having associated ticket validation numbers, and (v) is configured to generate tickets having associated ticket validation numbers~~ are configured to receive balance data and input ticket data, and wherein the gaming machines are configured to generate meter data, jackpot data, output ticket data and player data, apparatus for providing data storage and communications between the gaming machines and the central authority comprising:

a first relational database located in the central authority ~~and arranged to store (i) input data to be sent to one or more of the plurality of gaming machines to keep said one or more gaming machines operational and (ii) output data generated by the plurality of gaming machines,~~

~~wherein the input data comprises one or more credit balances corresponding to one or more player identification numbers and one or more ticket values corresponding to one or more ticket validation numbers, and~~

~~wherein the output data comprises meter data, jackpot data, ticket data, and player data~~

wherein the first relational database comprises a meter table, a jackpot table, a ticket table, a player table and a balance table;

a network; and

a data processing unit spaced apart from the first relational database and comprising:

a second relational database comprising a local meter table, a local jackpot table, a local ticket table, a local player table and a local balance table; and

a programmed hardware configured (1) to poll the gaming machines to obtain the output data generated by the gaming machines over the network; (2) to store said output data in the second database; (3) to transmit said output data over the network to the first database from the second database and then remove said output data from the second database after said transmission of said output data; (4) to periodically obtain the input data from the first database; (5) to store the periodically obtained input data in the second database; and (6) to transmit at least a portion of the periodically obtained input data required by one of the gaming machines to keep said one gaming machine operational from the second database to said one gaming machine without accessing the first database; said programmed hardware being configured to perform at least said process (6) without command from the central authority to provide a poller function and a data mover function, wherein:

(1) the poller function is configured to obtain meter data, jackpot data, output ticket data and player data generated by the gaming machines over the network, whereby the obtained meter data is stored in the local meter table, the obtained jackpot data is stored in the local jackpot table, the obtained output ticket data is stored in the local ticket table, and the obtained player data is stored in the local player table;

(2) the data mover function is configured to periodically transmit at least a portion of the obtained meter data, jackpot data, output ticket data and player data from the second relational database to the first relational database over the network, whereby the periodically transmitted meter data is stored in the meter table, the periodically transmitted jackpot data is stored in the jackpot table, the periodically transmitted output ticket data is stored in the ticket table, and the periodically transmitted player data is stored in the player table;

(3) the data mover function is further configured to periodically obtain input ticket data and balance data from the first relational database over the network, whereby the periodically obtained input ticket data is stored in the local

ticket table and the periodically obtained balance data is stored in the local balance table, and

(4) the poller function is further configured to transmit at least a portion of the periodically obtained input ticket data and the periodically obtained balance data from the second relational database to the gaming machines over the network when said portion is required by the gaming machines.

2. (Currently Amended) The apparatus of claim 1 wherein the network comprises a first network arranged to transmit data between the gaming machines and the second relational database and a second network arranged to transmit data between the second relational database and the first relational database.

3. (Currently Amended) The apparatus of claim 1 further comprising a first processor arranged to manage the first relational database and a second processor arranged to manage the second relational database.

4. (Canceled).

5. (Currently Amended) The apparatus of claim 1 wherein the ~~input data comprises~~ data mover function is further configured to obtain from the first relational database at least one of output ticket data, player data, jackpot data and meter data ~~for generated by the gaming machines played~~ within a predetermined preceding time period.

6-20. (Canceled).

21. (Currently Amended) In a gaming system comprising (i) a plurality of gaming machines ~~[[and]]~~ configured to receive balance data and input ticket data and configured to generate meter data, jackpot data, output ticket data and player data; (ii) a first relational database located in a central authority ~~and arranged to store (i) input data to be sent to one or more of said plurality of gaming machines to keep said one or more gaming machines operational and (ii) output data generated by said plurality of gaming machines, wherein at least~~

one of said plurality of gaming machines (i) comprises a meter configured to generate meter data, (ii) comprises a jackpot meter configured to generate jackpot data, (iii) is responsive to player cards having associated player identification numbers, (iv) is responsive to tickets having associated ticket validation numbers, and (v) is configured to generate tickets having associated ticket validation numbers comprising a meter table, a jackpot table, a ticket table, a player table and a balance table; and (iii) a second relational database spaced apart from the first relational database and comprising a local meter table, a local jackpot table, a local ticket table, a local player table and a local balance table, a method of providing data storage and communications between the plurality of gaming machines and the first relational database comprising:

(1) polling the plurality of gaming machines to obtain the output data, wherein said output data comprises the meter data, jackpot data, output ticket data, and player data generated by the plurality of gaming machines;

(2) storing the output data apart from the first database the obtained meter data in the local meter table, the obtained jackpot data in the local jackpot table, the obtained output ticket data in the local ticket table and the obtained player data in the local player table;

(3) periodically transmitting at least a portion of the output data stored apart from the first database stored meter data, jackpot data, output ticket data and player data to the first relational database and then removing the output data stored apart from the first database after said transmission of the output data;

(4) storing the periodically transmitted meter data in the meter table, the periodically transmitted jackpot data in the jackpot table, the periodically transmitted output ticket data in the ticket table and the periodically transmitted player data in the player table;

(5) periodically obtaining the input data input ticket data and the balance data from the first relational database, wherein said input data comprises one or more credit balances corresponding to one or more player identification numbers and one or more ticket values corresponding to one or more ticket validation numbers;

(5)-(6) storing the periodically obtained input data apart from the first database input ticket data in the local ticket table and the periodically obtained balance data in the local balance table; and

(6)-(7) transmitting at least a portion of the periodically obtained input data stored apart from the first database stored input ticket data and the stored balance data to one of the plurality

of gaming machines and keeping the one gaming machine operational without accessing the first database, when said portion is required by the plurality of gaming machines,

wherein at least said step (6) is performed without command from the central authority.

22. (Canceled).

23. (Currently Amended) The method of claim 21 wherein the input data step of periodically obtaining the input ticket data and the balance data further comprises periodically obtaining at least one of stored output ticket data, player data, jackpot data and meter data for generated by the gaming machines played within a predetermined preceding time period.

24-33. (Canceled).

34. (Currently Amended) In a The method of claim 21, wherein the gaming system comprising further comprises (iv) a second plurality of gaming machines and a first database located in a central authority and arranged to store (i) input data to be sent to one or more of said plurality of gaming machines to keep said one or more gaming machines operational and (ii) output data generated by said plurality of gaming machines, wherein at least one of said plurality of gaming machines (i) comprises a meter configured to generate meter data, (ii) comprises a jackpot meter configured to generate jackpot data, (iii) is responsive to player cards having associated player identification numbers, (iv) is responsive to tickets having associated ticket validation numbers, and (v) is configured to generate tickets having associated ticket validation numbers, configured to receive balance data and input ticket data and configured to generate meter data, jackpot data, output ticket data and player data; and (v) a third relational database spaced apart from the first and second relational databases and comprising a second local meter table, a second local jackpot table, a second local ticket table, a second local player table and a second local balance table, [[a]]the method of providing data storage and communications between the gaming machines and the first database further comprising the steps of:

(1) dividing the gaming machines into a first group and a second group;

(2) polling the gaming machines in the first group to obtain first output data, wherein said first output data comprises first meter data, first jackpot data, first ticket data, and first player data;

(3) storing the first output data apart from the first database;

(4) transmitting the stored first output data to the first database and then removing the first output data stored apart from the first database after said transmission of the stored first output data;

[[(5)]] (8) polling the second plurality of gaming machines in the second group to obtain second output data, wherein said second output data comprises second meter data, second jackpot data, second output ticket data, and second player data generated by the second plurality of gaming machines;

[[(6)]] (9) storing the second output data apart from the first database and apart from the first output data obtained second meter data in the second local meter table, the obtained second jackpot data in the second local jackpot table, the obtained second output ticket data in the second local ticket table and the obtained second player data in the second local player table;

[[(7)]] (10) periodically transmitting at least a portion of the stored second output data meter data, second jackpot data, second output ticket data and second player data to the first relational database and then removing the second output data stored apart from the first database after said transmission of the stored second output data;

(11) storing the periodically transmitted second meter data in the meter table, the periodically transmitted second jackpot data in the jackpot table, the periodically transmitted second output ticket data in the ticket table and the periodically transmitted second player data in the player table;

(8) periodically obtaining from the first database first input data for use in the first group of gaming machines, wherein said first input data comprises one or more credit balances corresponding to one or more player identification numbers and one or more ticket values corresponding to one or more ticket validation numbers;

(9) storing the periodically obtained first input data apart from the first database;

(10) transmitting at least a portion of the periodically obtained first input data stored apart from the first database to one of the first group of gaming machines without accessing the first database when said at least a portion of the periodically obtained first input data are required by

said one of the first group of gaming machines and keeping said one of the first group of gaming machines operational;

[[(11)]] (12) periodically obtaining from the first relational database ~~second input data second input ticket data and second balance data~~ for use in the second group plurality of gaming machines, wherein said second input data comprises one or more credit balances corresponding to one or more player identification numbers and one or more ticket values corresponding to one or more ticket validation numbers;

[[(12)]] (13) storing the periodically obtained ~~second input data apart from the first database and apart from the periodically obtained first input data~~ second input ticket data in the second local ticket table and the periodically obtained second balance data in the second local balance table; and

[[(13)]] (14) transmitting at least a portion of the ~~periodically obtained second input data stored apart from the first database and apart from the periodically obtained first input data stored second input ticket data and second balance data~~ to one of the second group of plurality gaming machines without accessing the first database when said at least a portion of the periodically obtained second input data are required by said one of the second group of gaming machines and keeping said one of the second group of gaming machines operational, when said portion is required by the second plurality of gaming machines.

wherein at least said steps (10) and (13) are performed without command from the central authority.

35-39. (Canceled).